THE NAUTILUS.

NOTICES OF NEW AMERICAN SNAILS.

BY H. A. PILSBRY.

Gastrodonta intertexta volus!æ, n. var.

Shell small, thin and fragile, subtranslucent, pale brown, somewhat glossy, the surface decussated by impressed spirals cutting fine but sharp striæ above, smoother but still decussate below; rather widely perforate. Whorls $5\frac{1}{2}$, the earlier $1\frac{1}{2}$ smooth, last whorl slightly angular at the periphery, quite convex beneath. Aperture without the slightest trace of callus within. Alt. 5, diam. 8 mm.

Near "Mount Taylor," an aboriginal mound on the St. John's River, south of Volusia, Volnsia Co., Florida; coll. by Pilsbry & Johnson. Types no 75,769 coll. A. N. S. P.

This shell differs from *intertexta* in the very small size, fragile texture, and total lack of an internal callus within the last whorl near the aperture. Some 56 specimens collected agree in these characters; and as I have seen no intermediate specimens, the form may prove be specific. However, the St. John's valley is deficient in lime; the land shells are in some other cases quite thin for their species, a fact which has its weight. But in the Tannersville valley of the Catskills, a sandstone region where snails are rare and actually eat each other's shells for lime, the *intertexta* I found still had the characteristic callus within the mouth.

Alexia myosotis marylandica, n. var.

Inner lip triplicate; outer lip with a conical tooth at its upper third, below which it is thickened by a callous rib.

Mouth of St. Leonard's Creek, Patuxent River, Maryland, collected by Charles W. Johnson.

Pyramidula Elrodi, n. sp.

Shell openly umbilicate, much depressed and acutely keeled, moderately solid. Spire but slightly convex; whorls 5, the first smooth, the next $1\frac{1}{2}$ rather convex, finely and regularly ribbed, the following whorls flattened, impressed above an acute keel which fills the suture, the last two whorle very strongly, irregularly ribbed, the ribs running with growth-lines, wrinkle-like; last whorl with an acute peripheral keel, pinched and concave above and below it, the keel of the preceding whorl projecting more or less above the suture; base convex, heavily ribbed, the umbilicus large and funnelshaped. Aperture oblique, irregularly oval, angular at position of the keel; peristome simple, the margins converging; parietal callus short and rather thin.

Alt. 9, diam. 21-22 mm.

Mission Mountains, Montana (Prof. M. J. Elrod).

This species holds toward *P. strigosa* a relationship like that of *P. cumberlandiana* toward *P. alternata*. Except in being more widely umbilicated and with a wider last whorl, it would be well resresented by the published figures of *Epiphragmophora circumcarinata* (Stearns). The ribs are less regular than in the typical form of *P. idahoensis*, but are equally strong. None of the wonderful series of *strigosa* varieties discovered by Hemphill approach this form; which could not, with present information, be considered a sub-species of *strigosa*. It is, like *idahoensis* and *haydeni*, doubtless the terminal member in a differentiation-series from the *strigosa* stock, but the connecting links are wanting the recent fauna, so far as present collections show.

It is named in honor of Prof. M. J. Elrod, of the University of Montana.

Helicodiscus Eigenmanni n. sp.

Shell similar to *H. lineatus*, but attaining a much greater size, the umbilicus much smaller in comparison with the diameter of the shell. Whorls $4\frac{3}{4}$ to 5, strongly lirate spirally. Aperture more lunate, embracing more of the preceding whorl, usually armed with a pair of small teeth within, as in *H. lineatus*. Umbilicus rather deep and cup-shaped. Alt. 1.9, diam. 4.8 mm., umbilicus 2 mm. wide.

Beaver Cave, near San Marcos, Hays Co., Texas.

This species was collected by Dr. C. H. Eigenmann, the well-known writer on fish morphology.

The specimens are very uniform in character, differing markedly from the common and wide-spread *H. lineatus*. The latter shows but little variation throughout its enormous range, and so far as I can see from a very large series, there is nowhere a tendency to become more narrowly umbilicated. The present form has been found only in the cave mentioned above, and may possibly be a modification induced by underground life, although until the immediate surroundings of the cave are searched, it would be unsafe to more than suggest this. I find only the ordinary *H. lineatus* from other Texan localities. Nothing like *H. Eigenmanni* occurred to me at San Antonio, New Braunfels, or Austin.